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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,082	03/31/2004	Edward K. Y. Jung	QQ1-0004US	9452
80118 7590 12/11/2008 Constellation Law Group, PLLC P.O. Box 220 Tracyton, WA 98393				
EXAMINER				
HUYNH, NAM TRUNG				
ART UNIT		PAPER NUMBER		
2617				
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12/11/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/816,082

Applicant(s)

JUNG ET AL.

Examiner

NAM HUYNH

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 8/25/08. Of the previously presented claims 1-26 no amendments were made.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 7/11/08, 9/17/08, and 9/19/08 have been considered by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-4, 9, 12-15, 20 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulgund et al. (US 2002/0161751) (hereinafter Mulgund) in view of Nishimura et al. (US 2004/0005889) (hereinafter Nishimura).

Regarding claims 1 and 12, Mulgund teaches a method comprising: transmitting at least a part of one or more sensor-addressed content indexes (Node Data Table) (paragraph 42). Additionally Mulgund teaches that the sensing nodes comprise computational devices possibly ranging in complexity from small embedded platforms to fully-fledged PCs (paragraph 26), but does not explicitly teach that the addressed content indexes are transmitted by motes. Nishimura teaches a wireless communication system comprising motes used for sensing (paragraphs 70, 71). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow motes to be used in the sensing network of Mulgund, as taught by Nishimura, in order to form a single substrate for the sensing node so that the cost per sensor can be reduced and the size thereof can be made small.

Regarding claims 2 and 13, Mulgund teaches transmitting at least a part of one or more mote-addressed content indexes further comprises: transmitting at least a part of at least one of a mote-addressed sensing index (functional capabilities) or a mote-addressed control index (type of sensor data) (paragraph 42).

Regarding claims 3 and 14, Mulgund teaches transmitting at least a part of one or more mote-addressed content indexes further comprises: transmitting at least a part of a mote-addressed routing/spatial index (Node Data Table) (paragraph 42).

Regarding claims 4 and 15, Mulgund teaches transmitting at least a part of one or more mote-addressed content indexes further comprises: effecting the transmitting with a reporting entity at a mote (paragraph 20).

Regarding claims 9 and 20, Mulgund teaches transmitting at least a part of one or more mote-addressed content indexes further comprises: effecting the transmitting in response to a query (paragraph 40).

Regarding claim 23, the limitations are rejected as applied to claim 1. Nishimura further teaches that the mote contains a remote transceiver (paragraph 70).

Regarding claim 24, the limitations are rejected as applied to claims 1-4.

Regarding claim 25, Nishimura teaches at least one reporting entity resident on the mote further comprises: a processor configured to transmit at least a part of said at least one mote-addressed content index (paragraph 70).

Regarding claim 26, Nishimura teaches the mote comprises: at least one of a processor, a memory, or a communications device formed from a substrate (paragraph 70).

5. Claims 5-7 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulgund et al. (US 2002/0161751) (hereinafter Mulgund) in view of Nishimura et al. (US 2004/0005889) (hereinafter Nishimura) as applied to claims 1 and 12, and further in view of Chin et al. (US 2004/0090326) (hereinafter Chin).

Regarding claims 5 and 16, the combination of Mulgund and Nishimura teaches the limitations set forth in claims 1 and 12, but does not explicitly teach that the

transmission of the mote-addressed content indexes are effected in response to a schedule. Chin discloses a wireless sensor network wherein the sensors communicate with one another pursuant to a pre-arranged or self-organized communication protocol and schedule (paragraph 4). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Mulgund and Nishimura to allow the motes to distribute information in response to a schedule, as taught by Chin, in order for the motes to assume a so-called sleep mode during intervening periods and conserve power.

Regarding claims 6 and 17, Chin teaches transmitting in response to a schedule further comprises: means for receiving the schedule (paragraph 16).

Regarding claims 7 and 18, Chin teaches transmitting in response to a schedule further comprises: means for deriving the schedule (paragraph 16).

6. Claims 10, 11, 21, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulgund et al. (US 2002/0161751) (hereinafter Mulgund) in view of Nishimura et al. (US 2004/0005889) (hereinafter Nishimura) as applied to claims 1 and 12, and further in view of Herrmann et al. (US 2003/0151513) (hereinafter Herrmann).

The combination of Mulgund and Nishimura teaches the limitations set forth in claims 1 and 12, but does not explicitly teach that the mote-addressed content indexes are transmitted utilizing at least one of a private or public key. Herrmann discloses a self-organizing wireless network wherein links between nodes are secured by encryption using for example public shared keys (paragraph 44). Therefore it would

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have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Mulgund and Nishimura to allow the motes to utilize a public shared key, as taught by Herrmann, in order to prevent unauthorized intrusion into the wireless network.

Response to Arguments

7. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

NTH
12/5/08